FILE 'USPAT' ENTERED AT 15:09:47 ON 30 AUG 1997

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  *                W E L C O M E   T O   T H E                  *
  *          U. S.   P A T E N T   T E X T   F I L E            *
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=> e cobbold/in
E#     FILE            FREQUENCY  TERM
--     ----            ---------  ----
E1     USPAT                2      COBBLEDICK, DAVID STANLEY/IN
E2     USPAT                2      COBBLEY, DAVID A/IN
E3     USPAT                0 --> COBBOLD/IN
E4     USPAT                1      COBBOLD, STEPHEN P/IN
E5     USPAT                1      COBBS, CARRINGTON S/IN
E6     USPAT                1      COBBS, DAVID/IN
E7     USPAT                3      COBBS, DAVID C/IN
E8     USPAT                1      COBBS, DAVID H/IN
E9     USPAT               12      COBBS, JAMES H/IN
E10    USPAT                7      COBBS, KEITH E/IN
E11    USPAT                1      COBBS, RICHARD W/IN
E12    USPAT               17      COBBS, WALTER H JR/IN

=> s e4
L1            1 "COBBOLD, STEPHEN P"/IN

=> d l1 1

1.  4,841,025, Jun. 20, 1989, Antibody preparations; Stephen P.
Cobbold, et al., 530/387.3; 424/133.1, 141.1, 154.1, 155.1; 530/388.1,
388.2, 388.7, 388.75, 388.8, 412, 413, 808; 935/107, 110 :IMAGE
AVAILABLE:

=> d l1 1 clm

US PAT NO:     4,841,025 :IMAGE AVAILABLE:            L1: 1 of 1

CLAIMS:

CLMS(1)

 We claim:

 1. A monoclonal antibody preparation, comprising intact IgG antibody
molecules having a single binding activity, which activity is in respect
of a cell surface antigen of a target cell, and having only one of the
two light chains which will bind to the antigen, the other non-binding
light chain being characteristic of a cell not specifically to the
antigen from which the source hybridoma derives, the proportion of such
antibody molecules relative to IgG antibody molecules having two light
chains which will bind to the antigen being about 10:1 or more to thereby
produce an enhancement of the binding activity of the mixture of the
antibody molecules as originally secreted.

CLMS(2)

 2. A monoclonal antibody preparation, comprising intact IgG antibody
molecules having a single binding activity, which activity is in respect
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of a cell surface antigen of a target cell, and having only one of the two light chains which will bind to the antigen, the other non-binding light chain being characteristic of a cell not specifically to the antigen from which the source hybridoma derives, said intact IgG antibody molecules being in an enhanced proportion of from about 10:1 to 1000:1 relative to IgG antibody molecules in which both light chains will bind to the antigen.

CLMS(3)

3. A monoclonal antibody preparation according to claim 1, in which said proportion is 100:1 or more.

CLMS(4)

4. A monoclonal antibody preparation according to claim 2, in which said proportion is 100:1 or more.

CLMS(5)

5. A monoclonal antibody preparation according to claim 1, in which the IgG antibody molecules in which only one of the two light chains will bind to the antigen are substantially free from IgG antibody molecules in which neither light chain will bind to the antigen.

CLMS(6)

6. A monoclonal antibody preparation having activity against a cell surface antigen of a target cell, said preparation comprising intact IgG antibody molecules having two identical heavy chains specific for the antigen, a first light chain specific for the antigen and a second light chain which is non-specific for the antigen and which is characteristic of a cell not specifically to the antigen from which the source hybridoma derives, the proportion of such antibody molecules relative to IgG antibody molecules having two of said heavy chains and two of said first light chains specific for the antigen being about 10:1 or more to thereby produce an enhancement of the binding activity of the mixture of the antibody molecules as originally secreted.

CLMS(7)

7. A monoclonal antibody preparation having activity against a cell surface antigen of a target cell, said preparation comprising intact IgG antibody molecules having two identical heavy chains specific to the antigen, a first light chain specific for the antigen and a second light chain which is non-specific to the antigen and which is characteristic of a cell not specifically to the antigen from which the source hybridoma derives, the proportion of such antibody molecules relative to IgG antibody molecules having two of said heavy chains and two of said first light chains specific for the antigen being about 10:1 to 1000:1.

CLMS(8)

8. A monoclonal antibody preparation according to claim 6, in which the proportion is 100:1 or more.

CLMS(9)

9. A monoclonal antibody preparation according to claim 7, in which the proportion is 100:1 or more.

CLMS(10)

10. A monoclonal antibody preparation according to claim 6, in which the IgG antibody molecules having two identical heavy chains specific for

said antigen, a first light chain specific for said antigen and a second light chain which is non-specific for said antigen, and substantially free from IgG antibody molecules having two of said heavy chains specific for the antigen and two of said second light chains non-specific for the antigen.

CLMS(11)

11. A monoclonal antibody preparation according to claim 6, in which the preparation derives from a hybridoma produced by a fusion involving a myeloma which will impart to the hybridoma a light chain characteristic of the myeloma.

CLMS(12)

12. A monoclonal antibody preparation according to claim 1, in which the preparation is active against an antigen on the surface of a blood cell.

CLMS(13)

13. A monoclonal antibody preparation according to claim 12, in which the blood cell is a lymphocyte.

CLMS(14)

14. A monoclonal antibody preparation according to claim 1, in which the preparation is active against an antigen associated with the surface of neoplastic cells.

CLMS(15)

15. A monoclonal antibody preparation according to claim 6, in which the first and second light chains are serologically distinct.

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=> s (cd4 or cd8) and antibod?(p)(nondeplet? or non(w)deplet?)
          1561 CD4
           677 CD8
         24455 ANTIBOD?
            61 NONDEPLET?
        788398 NON
         45990 DEPLET?
             4 ANTIBOD?(P)(NONDEPLET? OR NON(W)DEPLET?)
L2           2 (CD4 OR CD8) AND ANTIBOD?(P)(NONDEPLET? OR NON(W)DEPLET?)

=> d l2 1-2

1.  5,635,156, Jun. 3, 1997, Non-lethal methods for conditioning a
recipient for bone marrow transplantation; Suzanne T. Ildstad, 424/1.49,
130.1, 141.1, 152.1, 153.1, 154.1, 178.1, 181.1, 183.1; 600/1; 604/20
:IMAGE AVAILABLE:

2.  5,514,364, May 7, 1996, Non-lethal methods for conditioning a
recipient for bone marrow transplantation; Suzanne T. Ildstad, 424/1.49,
130.1, 141.1, 152.1, 153.1, 154.1, 178.1, 183.1; 600/1; 604/20 :IMAGE
AVAILABLE:

=> d l2 1-2 kwic

US PAT NO:     5,635,156 :IMAGE AVAILABLE:            L2: 1 of 2

SUMMARY:

BSUM(46)

 Attempts to induce tolerance to allogeneic bone marrow donor cells using
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combinations of depleting and **non-depleting** anti-**CD4** and **CD8** monoclonal **antibodies** (mAb) resulted in only transient tolerance to MHC-compatible combinations (Cobbold et al., 1992, Immunol Rev 129: 165; Qin et al.,. . . when MHC-disparate bone marrow was utilized (Cobbold et al., 1986, Transplantation 42: 239). Sharabi and Sachs attributed the failure of anti-**CD4**/**CD8** mAb therapy alone to the inability of mAb to deplete T cells from the thymus, since persistent cells coated with. . .

SUMMARY:

BSUM(61)

Recipient . . . detected with a second streptavidin antibody conjugated to PE (SA-PE). The various subsets were analyzed using anti-T lymphocyte mAb (.alpha..beta.TCR-PE, **CD4**-FITC, **CD8**-PE), shown in FIG. 6A-6F, and anti-B lymphocyte (B220-FITC), and anti-natural killer cell (NK1.1-PE) uAb displayed in

DETDESC:

DETD(21)

The . . . for it to enhance stem cell engraftment. The facilitatory cells express a unique profile of cell surface markers: Thy-1.sup.+, CD3.sup.+, **CD8**.sup.+, CD45.sup.+ CD45R.sup.+, MHC class II.sup.+, **CD4**.sup.-, CD5.sup.-, CD14.sup.-, CD16.sup.-, CD19.sup.-, CD20.sup.-, CD56.sup.-, .gamma..delta.-TCR.sup.- and .alpha..beta.B-TCR.sup.-. These cells are a newly recognized stromal cell population that is. . .

DETDESC:

DETD(39)

Recipients . . . minutes at 4.degree. C. Lineage typing was performed by two color flow cytometry using anti-B-cell (B220-FITC, Pharmingen), anti-T cell (.alpha..beta.-TCR-PE, **CD4**-FITC, **CD8**-PE, Pharmingen), anti-natural killer cell (NK1.1-PE, Pharmingen), anti-granulocyte (GR-1-FITC, Pharmingen), and anti-monocyte/macrophage (MAC-1-FITC, Boehringer Mannheim; Indianapolis, Ind.) Mab. These lineage-specific Mab. . .

US PAT NO: 5,514,364 :IMAGE AVAILABLE: L2: 2 of 2

SUMMARY:

BSUM(45)

Attempts to induce tolerance to allogeneic bone marrow donor cells using combinations of depleting and **non-depleting** anti-**CD4** and **CD8** monoclonal **antibodies** (mAb) resulted in only transient tolerance to MHC-compatible combinations (Cobbold et al., 1992, Immunol Rev 129:165; Qin et al., 1990,. . . tolerance when MHC-disparate bone marrow was utilized (Cobbold et al., 1986, Transplantation 42:239). Sharabi and Sachs attributed the failure of anti-**CD4**/**CD8** mAb therapy alone to the inability of mAb to deplete T cells from the thymus, since persistent cells coated with. . .

DRAWING DESC:

DRWD(8)
Recipient . . . detected with a second streptavidin antibody conjugated to PE (SA-PE). The various subsets were analyzed using anti-T lymphocyte mAb (.alpha..beta.TCR-PE, **CD4**-FITC, **CD8**-PE), shown in FIGS. 6A-6F, and anti-B lymphocyte (B220-FITC), and

anti-natural killer cell (NK1.1-PE) uAb displayed in FIGS. 6G-6J. FITC and. . .

DETDESC:

DETD(19)

The . . . for it to enhance stem cell engraftment. The facilitatory cells express a unique profile of cell surface markers: Thy-1.sup.+, CD3.sup.+, **CD8**.sup.+, CD45.sup.+ CD45R.sup.+, MHC class II.sup.+, **CD4**.sup.-, CD5.sup.-, CD14.sup.-, CD16.sup.-, CD19.sup.-, CD20.sup.-, CD56.sup.-, .gamma..delta.-TCR.sup.- and .alpha..beta.-TCR.sup.-. These cells are a newly recognized stromal cell population that is. . .

DETDESC:

DETD(37)

Recipients . . . at 4.degree. C. Lineage typing was performed by two color flow cytometry using anti-B-cell (B220-FITC, Pharmingen), anti-T cell (.alpha. .beta.-TCR-PE, **CD4**-FITC, **CD8**-PE, Pharmingen), anti-natural killer cell (NK1.1-PE, Pharmingen), anti-granulocyte (GR-1-FITC, Pharmingen), and anti-monocyte/macrophage (MAC-1-FITC, Boehringer Mannheim; Indianapolis, Ind.) Mab. These lineage-specific Mab. . .

Full Journal Title: 60th National Scientific Meeting of the American College of Rheumatology and the 31st National Scientific Meeting of the Association of Rheumatology Health Professionals, Orlando, Florida, USA, October 18-22, 1996. Arthritis & Rheumatism
ISSN: 0004-3591
Language: ENGLISH
Document Type: CONFERENCE PAPER
Print Number: Biological Abstracts/RRM Vol. 048 Iss. 011 Ref. 203384

2/3/14 (Item 14 from file: 55)
DIALOG(R)File 55:BIOSIS PREVIEWS(R)
(c) 1997 BIOSIS. All rts. reserv.

13224262 BIOSIS Number: 99224262
T cell hypothesis in rheumatoid arthritis (RA) tested by humanized **non-depleting** anti-**CD4** monoclonal **antibody** (mAb) treatment I: Suppression of disease activity and acute phase response
Panayi G S; Choy E H S; Connolly D J A; Regan T; Manna V K; Rapson N; Kingsley G H; Johnston J M
Rheumatol. Unit, Guy's Hosp., UMDS, London, UK
Arthritis & Rheumatism 39 (9 SUPPL.). 1996. S244.
Full Journal Title: 60th National Scientific Meeting of the American College of Rheumatology and the 31st National Scientific Meeting of the Association of Rheumatology Health Professionals, Orlando, Florida, USA, October 18-22, 1996. Arthritis & Rheumatism
ISSN: 0004-3591
Language: ENGLISH
Document Type: CONFERENCE PAPER
Print Number: Biological Abstracts/RRM Vol. 048 Iss. 011 Ref. 203383

2/3/15 (Item 15 from file: 55)
DIALOG(R)File 55:BIOSIS PREVIEWS(R)
(c) 1997 BIOSIS. All rts. reserv.

13223537 BIOSIS Number: 99223537
Results of a placebo-controlled multicenter trial using a primatized **non-depleting**, anti-**CD4** monoclonal **antibody** in the treatment of rheumatoid arthritis
Levy R; Weisman M; Wisenhutter C; Yocum D; Schnitzer T; Goldman A; Schiff M; Leiden B F; Solinger A; MacDonald B; Lipani J
Olympia, WA 98502, USA
Arthritis & Rheumatism 39 (9 SUPPL.). 1996. S122.
Full Journal Title: 60th National Scientific Meeting of the American College of Rheumatology and the 31st National Scientific Meeting of the Association of Rheumatology Health Professionals, Orlando, Florida, USA, October 18-22, 1996. Arthritis & Rheumatism
ISSN: 0004-3591
Language: ENGLISH
Document Type: CONFERENCE PAPER
Print Number: Biological Abstracts/RRM Vol. 048 Iss. 011 Ref. 202658

2/3/16 (Item 16 from file: 55)
DIALOG(R)File 55:BIOSIS PREVIEWS(R)
(c) 1997 BIOSIS. All rts. reserv.

13104687 BIOSIS Number: 99104687
Influence of selective T-lymphocyte depletion on the lung pathology of gnotobiotic calves and the distribution of different T-lymphocyte subsets following challenge with bovine respiratory syncytial virus
Thomas L H; Cook R S; Howard C J; Gaddum R M; Taylor G
Inst. Anim. Health, Compton, Newbury RH20 7NN, UK
Research in Veterinary Science 61 (1). 1996. 38-44.

Choy E H S; Connolly [redacted] J A; Regan T; Manna V K; Rapson [redacted] N; Kingsley G H; Panayi G S; Johnston J M
Rheumatology Unit, Guy's Hosp., UMDS, London, UK
Immunology 89 (SUPPL. 1). 1996. 92.
Full Journal Title: Joint Congress of the British Society for Immunology and the Biochemical Society, Harrogate, England, UK, December 10-13, 1996. Immunology
ISSN: 0019-2805
Language: ENGLISH
Document Type: CONFERENCE PAPER
Print Number: Biological Abstracts/RRM Vol. 049 Iss. 003 Ref. 048953

2/3/11 (Item 11 from file: 55)
DIALOG(R)File 55:BIOSIS PREVIEWS(R)

13319410 BIOSIS Number: 99319410
Induction of "infectious " tolerance to MHC-incompatible cardiac allografts in sensitized rat recipients treated with a **nondepleting** **CD4** monoclonal **antibody**
Onodera K; Lehmann M; Volk H-D; Sayegh M H; Kupiec-Weglinski J W
Surg. Res. Lab., Harv. Med. Sch., Dep. Surg. Med., Brigham and Women's Hosp., Boston, MA, USA
Surgical Forum 47 (0). 1996. 423-427.
Full Journal Title: Surgical Forum
ISSN: 0071-8041
Language: ENGLISH
Print Number: Biological Abstracts Vol. 103 Iss. 002 Ref. 022524

2/3/12 (Item 12 from file: 55)
DIALOG(R)File 55:BIOSIS PREVIEWS(R)

13224264 BIOSIS Number: 99224264
T cell hypothesis in rheumatoid arthritis (RA) tested by humanized **non-depleting** anti-**CD4** monoclonal **antibody** (mAb) treatment III: Immunological effects
Connolly D J A; Choy E H S; Rapson N; Regan T; Kingsley G H; Johnston J M ; Panayi G S
Rheumatol. Unit, Guy's Hosp., UMDS, London, UK
Arthritis & Rheumatism 39 (9 SUPPL.). 1996. S245.
Full Journal Title: 60th National Scientific Meeting of the American College of Rheumatology and the 31st National Scientific Meeting of the Association of Rheumatology Health Professionals, Orlando, Florida, USA, October 18-22, 1996. Arthritis & Rheumatism
ISSN: 0004-3591
Language: ENGLISH
Document Type: CONFERENCE PAPER
Print Number: Biological Abstracts/RRM Vol. 048 Iss. 011 Ref. 203385

2/3/13 (Item 13 from file: 55)
DIALOG(R)File 55:BIOSIS PREVIEWS(R)

13224263 BIOSIS Number: 99224263
T cell hypothesis in rheumatoid arthritis (RA) tested by humanized **non-depleting** anti-**CD4** monoclonal **antibody** (mAb) treatment II: Clinical activity is related to pharmacodynamic effects
Choy E H S; Connolly D J A; Regan T; Manna V K; Rapson N; Kingsley G H; Panayi G S; Johnston J M
Rheumatol. Unit, Guy's Hosp., UMDS, London, UK
Arthritis & Rheumatism 39 (9 SUPPL.). 1996. S244.